
III. One-Time Assessment of Federal Consistency

Two purposes are addressed in carrying out a one-time consistency review of eligible federal activities:

- To identify potential inconsistencies between these federal assistance programs and direct development projects and the objectives of *The Galveston Bay Plan*; and,
- To describe how these specific inconsistencies will be resolved.

Procedure

The one-time review was conducted based on the federal program inventory (above). Criteria were developed by the Management Conference upon which to base a consistency determination (see FIGURE 1). These criteria were used to identify current activities which have the potential to be inconsistent and to identify federal programs and projects which have the potential to support or conduct future activities which may be inconsistent. The latter are listed in TABLES IA and IB and discussed in APPENDIX V.

A two-page summary of findings of the consistency review applied to each action plan (including consideration of each action within the action plan) is presented in *The Galveston Bay Plan* and in this report (APPENDIX IV). Federal programs and projects that can conflict with or further the goals and objectives of each action were identified. Future inconsistencies with the goals and objectives of the action plan could occur in the numerous programs or projects listed in TABLES IA and IB. Projects which may occur in the future within the Galveston Bay study area, activities in the upper watershed that may significantly alter the quantity, quality and timing of fresh water inflows to the estuary, or activities offshore from the study area which may require onshore infrastructure that may significantly affect the estuary will be reviewed for federal consistency. The Action Plan Summaries identify specific criteria which will be used to determine if a federal activity is consistent with the specific action plan.

Potential Inconsistencies

In carrying out the one-time consistency review, numerous federal programs and projects were identified that have the potential to support or conduct activities which conflict with or enhance the implementation of *The Galveston Bay Plan*. These are listed in TABLES IA and IB. The resolution of these inconsistencies will be dealt with on a case-by-case basis through the ongoing consistency review of future proposed activities carried out by these federal programs and projects. For some of the programs identified, insufficient information exists to determine consistency until such time as Environmental Impact Statements or other defining documents are available.

FIGURE 1

Criteria for Consistency Determination

Any federal action which provides technical or financial support which may affect the CCMP or directly conducts an activity which may affect the CCMP is subject to federal consistency review under CWA Section 320. Any such action shall be reviewed for consistency with the CCMP if it is located within the Galveston Bay National Estuary study area or may significantly alter the quantity, quality, or timing of freshwater inflows to the Galveston Bay Estuary. These criteria were developed to facilitate a better understanding of the consistency review process and are not to circumvent the requirements of the CCMP. The ultimate criteria for evaluating consistency with the CCMP is the CCMP itself. The criteria listed below should never be used in such a way to allow projects and programs which are inconsistent with the plan itself to be found consistent. An activity selected for review shall be found to be consistent with the Galveston Bay CCMP if it is demonstrated that the proposed activity will:

- preserve or enhance the water and sediment quality of Galveston Bay;
- avoid causing a significant increase in nonpoint source pollution entering Galveston Bay;
- not contribute to overflow and bypass problems in existing sewage collection systems which may result from construction at sewage treatment facilities or sewage collection systems;
- include an acceptable degree of consideration of the potential for overflow and bypass problems on plans for sewage treatment facilities or sewage collection systems;
- not represent potential future contributions to possible future violations of state water quality standards;
- preserve or enhance the freshwater inflows necessary to maintain the health and productivity of Galveston Bay;
- not result in net loss of estuarine or riparian wetlands, oyster reefs, or bird island area or function;
- consider alternatives which result in a public trust for conservation purposes when involving the transfer of federally owned or controlled real property which contains valuable estuarine or riparian wetlands or natural reefs;
- include a material placement plan for the deposition of dredge or fill materials that maximizes the beneficial use of the materials, when appropriate;
- not be located in a wetland, water course, or on a water bottom unless it must be in such a location in order to achieve its basic purpose (allowable exceptions will be considered for health and safety);
- avoid activities which could increase shoreline erosion or subsidence in the Galveston Bay System;
- avoid activities with a potential for the introduction of exotic species into the Galveston Bay System;
- be consistent with the TPWD Species Management Plan and any Species Management Plan developed in accordance with the CCMP;
- use or encourage use of the best available technology to reduce bycatch, when appropriate;
- use or encourage use of the best available technology to reduce impingement or entrainment mortalities, when appropriate;
- use or encourage use of the best available technology to prevent manmade debris from entering the Galveston Bay System;
- have all the required spill prevention and response plans;
- give preference to projects that demonstrate an intent to further the goals and objectives of the CCMP over those lacking such demonstration;
- be consistent with all provisions of the goals, objectives, and policies identified in the action plans for the CCMP; and
- contribute to the implementation of the goals, objectives and specific actions identified in the CCMP, if the activity has the authority and resources to do so.

There are currently activities being proposed in the Galveston Bay area which are either supported or conducted by some of these federal programs. The Management Conference has determined that the following current activities have the potential to be inconsistent with the goals and objectives of *The Galveston Bay Plan*:

- Houston/Galveston Navigation Channels, Texas Project
- Buffalo Bayou Project: Brays Bayou, Greens Bayou and Cypress Creek
- Wallisville Lake Project
- Interstate 10 at: Turtle Bayou, Wallisville, Cedar Bayou and Trinity River
- NASA Road 1 Construction from I-45 to SH 146
- Expansion of the Strategic Petroleum Reserve to One Billion Barrels
- Maintenance Dredging of the Intracoastal Waterway

Rationale for Determination and Potential Resolutions

Houston/Galveston Navigation Channels, Texas Project. This project involves increasing the channel depth to 45 feet and the width to 530 feet. Due to the implications that such a project could have on Galveston Bay, the GBNEP is involved in the development process for the Supplemental Environmental Impact Statement (SEIS). An Interagency Coordination Team (ICT) has been established by the Corps to advise the Corps in development of the SEIS. The GBNEP is represented on this team by the Program Director (representing the Management Committee) and the Chair of the Scientific/Technical Advisory Committee. To date, the efforts of the ICT have greatly improved inter-agency coordination, and have encouraged resolution of any emerging inconsistencies. The GBP will conduct a consistency review of this direct federal action when the draft SEIS is published (currently scheduled for March, 1995).

To be consistent with *The Galveston Bay Plan*, the currently proposed expansion project must preserve or enhance the water and sediment quality of Galveston Bay, not result in a net loss of estuarine or riparian wetlands or bird island areas, and not result in circulation changes that negatively affect productivity and ecosystem health. Based on available data in a special report prepared for the ICT, the ICT has reached a consensus that the water quality impacts associated with pollutant releases will not be significant. At the request of the ICT, a number of other reports are being prepared to address the environmental concerns associated with the project. They include a salinity modeling study, an oyster study, a beneficial uses study, and a marsh creation demonstration. The U.S. Army Corps of Engineers is also conducting a benthic recovery study to determine the capacity of the bottom-dwelling community to respond to deposition of dredged sediments.

The Corps' Chief of Engineer's Report on the Houston/Galveston Navigation Channels, Texas Project commits to developing the project in a manner that is consistent with *The Galveston Bay Plan*. Therefore, once *The Galveston Bay Plan*

is approved by EPA, the GBP will coordinate with the Corps to ensure that consistency is achieved.

Buffalo Bayou Project. In 1988, an Environment Impact Statement (EIS) was completed for flood control projects on several Houston bayous (Buffalo Bayou Project). These bayous include Buffalo Bayou, Greens Bayou, Sims Bayou, Brays Bayou and Cypress Creek. Since then, the project has been revised for several of the tributaries and divided into separate projects. Those requiring a new environmental document will be subject to the GBNEP federal consistency review at the time the environmental document is developed. The Brays Bayou, Greens Bayou, and Cypress Creek projects have been redesigned and will be subject to the GBNEP consistency review.

These projects have the potential to alter the natural drainage patterns of runoff. By reducing the retention time of runoff waters, the timing and quality of the waters that enter the estuary may be altered. These projects may also involve the removal of riparian wetland vegetation. This vegetation functions as a filtration system, and could indirectly affect the water quality. To be consistent with *The Galveston Bay Plan*, these flood control projects must be designed in such a manner as to preserve or enhance the water and sediment quality and habitats of Galveston Bay and avoid causing a significant increase in the nonpoint source pollution entering Galveston Bay.

The GBP will review the project modifications for Brays Bayou, Greens Bayou and Cypress Creek. The GBP will coordinate with the Corps during the development of the environmental assessment (EA) on these modifications. The Corps has agreed to make an effort during this coordination to achieve consistency with *The Galveston Bay Plan*. The Corps has also expressed interest in coordinating with the GBP, once *The Galveston Bay Plan* is approved by EPA, to try to develop a memorandum of understanding (MOU) addressing these projects.

Wallisville Lake Project. An EIS was completed on the original project design for the Wallisville Lake Project. The purpose of this project is to construct a reservoir and a barrier to prevent salinity intrusion when the Trinity River is at a low flow rate. Currently, freshwater releases from Lake Livingston are required during these periods of low flow to prevent salinity intrusion. The freshwater releases of up to 1,000 cfs (645 mgd) daily from May 15 through September 16 are provided by the City of Houston, are contractual in nature and are not controlled by the Corps.

The project has gone through revisions to minimize environmental impacts and avoid bald eagle nesting sites. This included reducing the size and depth of the reservoir. An EA and a finding of no significant impact (FONSI) have been completed on these revisions. Yet another revision is being considered which would eliminate the need for an impoundment and would retain the natural flow of the river to the maximum extent possible. This revision would involve a gated structure in the river which would function as a salinity barrier. An EA will be prepared on this revision (January, 1995) and it will be subject to consistency review. Once the project is completed, the releases from Lake Livingston will no longer be required to control salinity intrusion. This could result in a net

reduction of the freshwater inflows to Galveston Bay. To be consistent with *The Galveston Bay Plan*, the EA must demonstrate that the project will preserve or enhance the freshwater inflows necessary to maintain the health and productivity of Galveston Bay. The GBP staff will coordinate with the Corps during the development of the EA to ensure adherence to this criterion.

Interstate 10. There is currently an interstate widening project being conducted in the Old and Lost River area (I-10 at Old and Lost River). This project is already under construction and, therefore, will not be subject to the GBP federal consistency review. However, there will be a series of I-10 improvement projects occurring over the next decade which will require federal funding. Among the most imminent are replacements of bridges at Turtle Bayou (I-10 at Turtle Bayou), Wallisville (I-10 at Wallisville), Cedar Bayou (I-10 at Cedar Bayou) and Trinity River (I-10 at Trinity River). The grant application and environmental documents for these projects will be subject to the GBP federal consistency review.

These projects have the potential to alter natural hydrology, cause nonpoint source discharges, and alter small amounts of wetland habitat. To be consistent with *The Galveston Bay Plan*, these projects must preserve or enhance the water and sediment quality of Galveston Bay, avoid causing significant increases in nonpoint source pollution entering Galveston Bay, preserve or enhance the freshwater inflow necessary to maintain the health and productivity of Galveston Bay, and not result in net loss of estuarine or riparian wetlands. The GBP will coordinate with the Texas Department of Transportation (TxDOT) and Federal Highway Administration (FHA) during the review of the federal grant application and environmental documents to ensure that these proposed improvements to I-10 are designed to meet these criteria and are consistent with *The Galveston Bay Plan*.

NASA Road 1 Construction from I-45 to SH 146. A widening project is being proposed for NASA Road 1 from I-45 to SH 146. It will be widened from 4 and 6 lanes to 6 and 8 lanes. A FONSI was issued by the FHA on March 4, 1988 for the original design which involved only one acre of wetlands. There has been a decision to revise the project to reroute the road to go around the town of Webster. A revised EA is being prepared for the project modification. The revised EA will be subject to the GBP federal consistency review.

This revised route may result in an increase in the amount of wetlands to be altered, alter natural hydrology, or increase NPS pollutants. To be consistent with *The Galveston Bay Plan*, the project must be designed to preserve or enhance the water quality of the bay, avoid causing significant increases in nonpoint source pollution, and not result in a net loss of estuarine or riparian wetlands. The GBP will coordinate with TxDOT and FHA during the development of the EA to ensure that these criteria are met and that the rerouting of NASA Road 1 is consistent with *The Galveston Bay Plan*.

Expansion of the Strategic Petroleum Reserve to One Billion Barrels. Congress has required the Department of Energy (DOE) to develop a plan for the expansion of the Strategic Petroleum Reserve. Part of that plan would involve the

construction of a pipeline from the Big Hill Reserve at Winnie, Texas to the Port of Houston. A draft EIS and draft SEIS have been prepared on this project. The alternative of not implementing the plan is being considered and the Secretary of Energy is re-addressing the need for this expansion project. Future appropriations for this project are very unlikely. If the Secretary of Energy decides to pursue the implementation of this expansion plan, the development of the plan will be subject to federal consistency review. The construction of this pipeline route would have the potential to alter wetlands and cause oil spills. One of the proposed routes will cross bottomland hardwoods in the Trinity River basin.

To be consistent with *The Galveston Bay Plan*, the EIS must demonstrate: that the proposed pipeline will not result in a net loss of estuarine or riparian wetlands, oyster reefs, or bird island areas; that its location in wetlands, water courses, or water bottoms must be such that all the required spill prevention and response plans will be completed prior to construction. The GBP will coordinate with the DOE to ensure that these demonstrations are included in the final EIS.

Maintenance dredging of the Intracoastal Waterway. The Gulf Intracoastal Waterway requires periodic federally-supported maintenance dredging in order to maintain navigability. This channel is an important transportation artery for barges, commercial fishing vessels, recreational vessels, and petroleum industry-related traffic. Along some reaches of the Intracoastal Waterway, the design width of the channel has been exceeded over time by erosion of the channel's banks. In some locations, significant wetlands have been replaced by open water due to the erosion caused primarily by vessel wakes.

The erosion of Intracoastal Waterway banks as a result of maintaining this channel for navigation has the continuing potential to alter wetlands. The GBP will work with the Corps to determine a process for maintenance dredging consistency review. Should the Texas CMP be adopted, a five year program to implement a similar review is planned. The GBP will coordinate with and adopt this or a similar approach to assure consistency with *The Galveston Bay Plan*.